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By email and regular mail
(SAPcomments@CDC.GOV)

Select Agent Program
c/o Minh Thomas
Centers for Disease Control and Prevention
1600 Clifton Road, NE, MS E-79
Atlanta, GA 30333

Re: Comment on the Interim Final Rule for one Select Agent, Botulinum Toxin

Dear Ms. Thomas and the Review Committee:

Sections 73.5(d)(1) and 73.5(f)(4) of the Interim Final Select Agent Rule (42 CFR 73) exempt an organization from registering under the Rule if it possesses "…0.5 mg of Botulinum neurotoxins…," or equivalently, 500 micrograms of these toxins. However, based on primate studies, the human lethal amount of botulinum toxin by intravenous exposure is 0.10 microgram, by aerosol exposure (inhalation) is 0.75 microgram, and by oral exposure (ingestion) is 75.0 micrograms (1). Thus, the proposed 500 microgram amount of unregistered and unregulated botulinum toxin represents, respectively, 5000 intravenous lethal doses, 667 inhalational lethal doses, and 6.7 oral lethal doses.

The advisability of adopting the interim rule with this allowance for 500 micrograms of botulinum toxin was discussed in plenary session at the annual national Interagency Botulism Research Coordinating Committee meeting held in Madison, Wisconsin in October 2002. It was the group consensus (no dissent was voiced) that 500 micrograms was excessive and that the Final Rule should require any amount of botulinum toxin to be registered. The interim rule was also discussed at the National Institute of Allergy and Infectious Disease's Blue Ribbon Technical Advisory Panel on Botulinum Toxin at its November 2002 meeting. Again the consensus was unanimous that all holdings of botulinum toxin, however large or small, should be registered and governed by the Select Agent Rule. Many agencies and institutions were represented at these meetings. Because some of the participants could not comment officially on behalf of their institutions, I was asked to serve as meeting *rapporteur* and to convey the conclusions of these botulinum experts to you.

In addition to the intrinsic danger of a 500 microgram amount of botulinum toxin, meeting participants anticipated that the increased funding for biodefense work may attract newcomers to the field, who lack previous experience in working with botulinum toxin and therefore are at greater

risk of laboratory accident. Also, meeting participants noted that it might be possible for a "front" laboratory or institution to order just under 500 micrograms of botulinum toxin from each of the several commercial vendors simultaneously and accumulate a cache of toxin that a terrorist might access.

For all these reasons the botulinum toxin scientific community recommends and requests that the Final Rule not permit any unregistered botulinum toxin (other than medicinal) to be held in the United States.

Sincerely yours,

Stephen S. Arnon, M.D.
Founder and Chief
Infant Botulism Treatment
and Prevention Program

1. Arnon SS, Schechter R, Inglesby TV, et al. Botulinum toxin as a biological weapon: medical and public health management. JAMA 2001;285:1059-1070.